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**Package Contents**

- 1 – DCL11.xx Automotive Point-Of-Load DC-DC15W Power Supply
- 1 - 3 pin power input cable Mini Ft. Jr. 4.2mm
- 1 - 2 pin power output cable. Micro Ft. 3.0mm
- 1 - Quick User guide (the one you are reading)

**General Information**

DCL11-xx is designed to power LOW power consumption peripherals that consumes less than 15 watts of power. The output voltage can be set to 5V, 7.5V, 9V or 12V. The input voltage must be at least 1V above the output voltage. If the input voltage is below the set output voltage then the output voltage will be approximately 1V less than the input voltage. Input to output voltage drop changes with the load.

The main reason to use this device is to protect the devices from over voltage conditions and transients.

Typical applications: USB hubs power, GPS receivers, WiFi, Optical devices, LCD monitors, etc.

**General wiring guidelines**

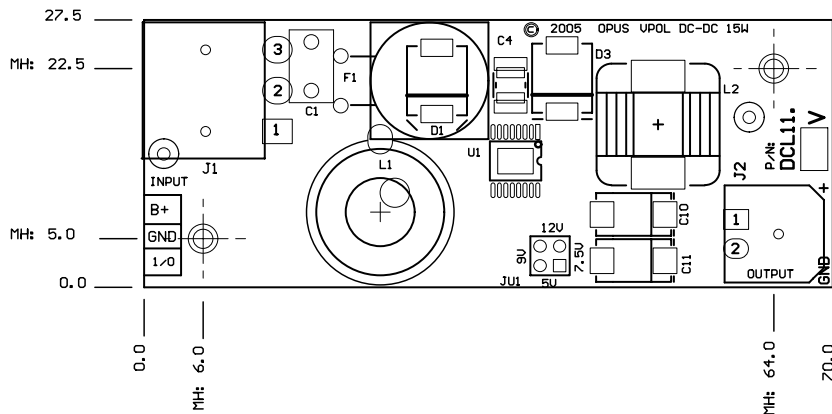
Refer to the application drawing

Configure DC-DC JU1 jumper to match input voltage to the device to be powered.

Use a #18 AWG or thicker wire to connect the unit to the battery. Use #20 AWG wire for on/off input.

Install and wire the DCL11. Make sure not to short the bottom of the PCB to ground or Batt.

**DCX3 DC-DC PCB Dimensions**



Part #: DCL11-xx Stp-Dn 15W Vehicle DC/DC Cnvr tr  
 OPUS Solutions, Inc. Mechanical Drawing

**J1 - Input Power Connector**

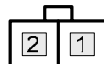
Pin#	Function	Description
1	ON/OFF	On/Off (Input - RED)
2	GND	Power Ground (Input - BLK)
3	Batt	+Battery (Input - YEL)



Connector type used: Molex: 36-30-3035 or equ  
 Mating connector type: Molex: 39-01-4030 or equ

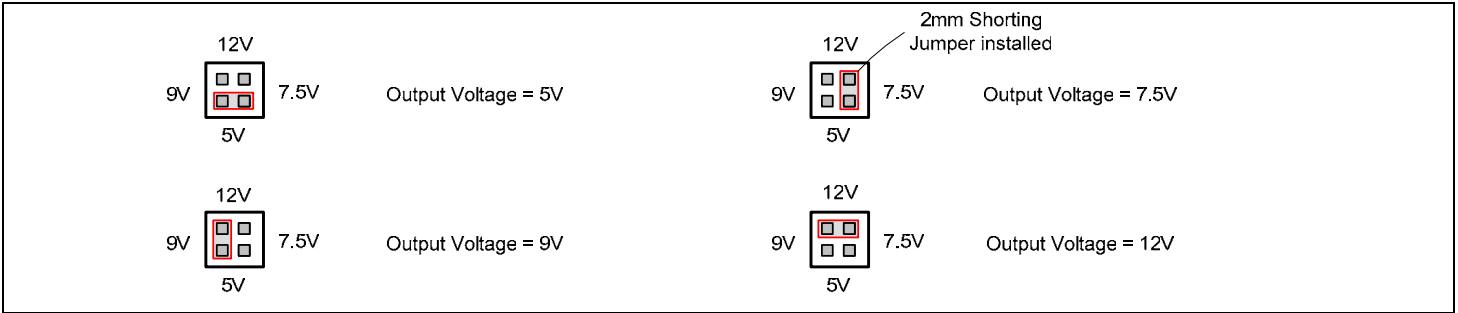
**J11 – Output Power Connector**

Pin#	Function	Description
1	+ V out	+V set by jumper (Output - RED)
2	GND	Power Ground (Input - BLK)

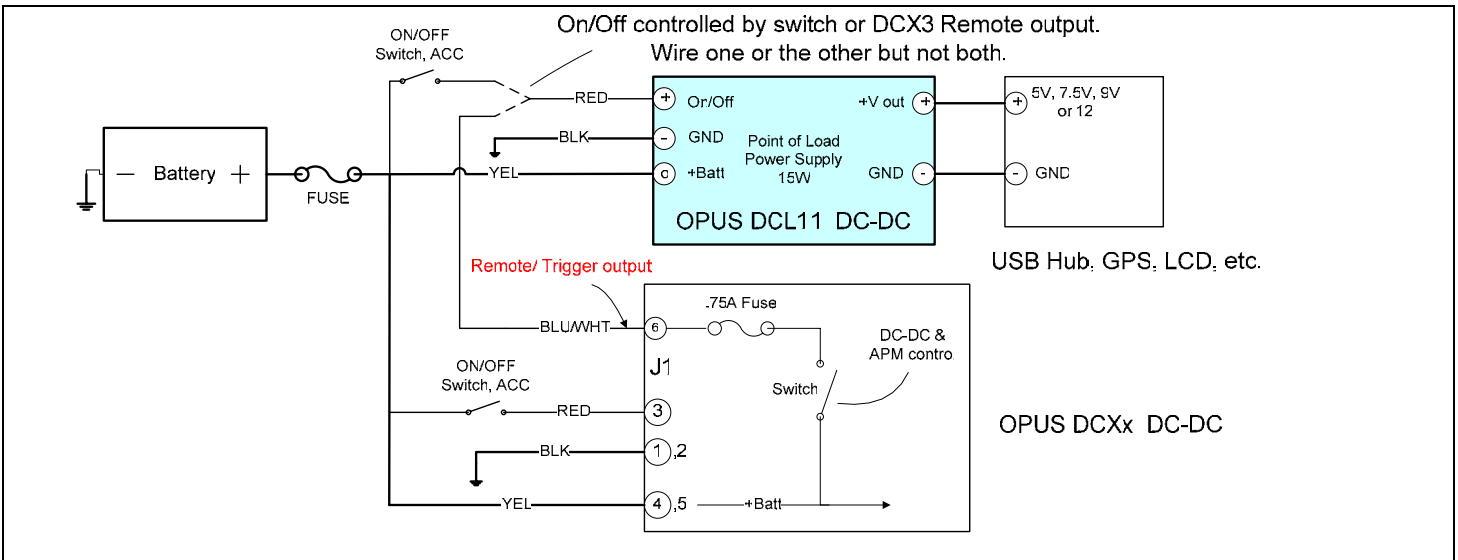


Connector type used: Molex: 43650-0200 or equ  
 Mating connector type: Molex: 43645-0200 or equ

**JU1 – Output Voltage Programming Jumper Block**



**DC-DC Application Example**



**Technical Specifications**

**Input:**

Normal input voltage operating range: 6.5V to 30V DC ( note: input voltage must be greater than output voltage)  
 Input Protection: LC Pi filter  
 Input Fuse: 1.8A PTC  
 Low battery shutdown voltage: Input Voltage less than 70% of output voltage  
 Quiescent current drain: <2 mA  
 Input Power Mating connector: Rectacle: Molex: P/N: 39-01-4030  
 Crimps: Molex: P/N: 39-00-0213

**Output:**

Output Voltage: +5V, +7.5V, 9V or 12V 15W absolute max  
 Voltage selection is set a 2mm shunt jumper  
 Output Power Mating Connector: Receptacle: Molex: P/N: 43645-0200  
 Crimps: Molex: P/N: 43030-0001

**General:**

Power supply efficiency: > 90%  
 Operating Temperature Range: -25°C to 70°C  
 MTBF: 500,000 hrs min.  
 Cooling: Forced air or thermal coupling to heat sink for loads above 10 W.  
 External Dimensions of PCB module: 70mm x 27.5mm x 12.7mm (L x W x H)  
 2.75" x 1.09" x 0.5"